

CLAIMS: (ORIGINAL TRANSLATION)

[1] An information recording method of recording a recording track and a prepit positioned between the tracks characterized by comprising step of:

recording the recording track and the prepit by sequentially deflecting a single beam.

[2] An information recording method of recording a recording track and a prepit positioned between the recording tracks characterized by comprising Steps 1 to 4, which are sequentially repeated, of:

(Step 1) recording the recording track by irradiating a beam onto an original disc;

(Step 2) deflecting the beam used for recording the recording track to a position where a prepit is to be formed when the beam reaches a predetermined position on the original disc;

(Step 3) recording the prepit by irradiating the beam onto the original disc; and

(Step 4) deflecting the beam again to the position of the original disc where the deflection from the recording of the recording track to the recording of the prepit takes place when the beam reaches a predetermined position of the original disc.

[3] An information recording method according to Claim 1 or 2, wherein

the beam is an electron beam.

[4] An information recording apparatus including a rotation driving unit for supporting and rotating an original disc, a movement driving unit for moving the rotation driving unit in a radius direction of an original disc, and a beam irradiating means for irradiating a single beam onto the original disc so as to be freely deflectable, the information recording apparatus comprising:

a deflection signal generating means for generating a radius direction deflection signal for deflecting the single beam to the radius direction of the original disc and a tangential direction deflection signal for deflecting the single beam to a tangential direction of the original disc; and

a beam deflecting unit for deflecting the single beam on the basis of the radius direction deflection signal and the tangential direction deflection signal to record the track and the pre-pit on the original disc using the single beam deflected in the radius and tangential directions.

[5] The information recording apparatus according to Claim 4, wherein

the beam is an electron beam.